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| Applica | ion/Contr | ol No. |
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|         |           |        |

10/807,338

CHO ET AL.

Applicant(s)/Patent under Reexamination

Examiner

Art Unit

Ellen Kim

2874

| <b>√</b> | Rejected |
|----------|----------|
| 1        | Allowed  |

| ı | (Through numeral)<br>Cancelled |
|---|--------------------------------|
| ÷ | Restricted                     |

| N | Non-Elected  |
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| _ | Interference |

| A | Appeal   |
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| 0 | Objected |

| Claim Date       |  |                |              |          |          |  |  |              | ٦              |              |    |
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|                  |  |                |              |          |          |  |  |              |                |              |    |
| Final            | Original   | 9/16/07        |              |          |          |  |  |              |                |              |    |
| 1                | 1  | =              |              | T        | Т        | Т  | $\top$   | 1            | 1              |              | 1  |
| 1<br>2<br>3<br>4 | 1<br>2<br>3<br>4<br>5<br>6                               | -              | ┢            | 1        | +        | +  | +  | +-           | +              | ┰            | 1  |
| -                | -  | 1              | ⊢            | ┰        | ┰        | 1-   | +-   | +            | ╁              | ╄            | 4  |
| 3                | 3  | 트              | ऻ_           | ⊢        | ╄-       | <del> </del>                                     | 1  | 4_           | -              | _            | 4  |
| 4                | 4  | 트              | L            | _        |          | 1_   |  |              | _              |              |    |
|                  | 5  | l              | l            |          |          |  | 1  | 1            | 1              |              | Į  |
| 5                | 6  | =              | Г            | T        | Т        | T  |  |              |                | 1.           | 1  |
| 5<br>6           | 7  | =              |              | +-       | ╈        | T  | $^{\dagger}$                                     | <del> </del> | 1              | $\vdash$     | 1  |
| 7                |  | ┰              | -            | +        | ╁╌       | ╁  | ╁  | +            | +-             | ╁            | ┨  |
| 7                | 8  | H              | -            | ┼-       | +-       | ╁  | -  | ╁            | -              | <del> </del> | 4  |
|                  | 9  | =              | <b>!</b>     | ↓_       | 1        | ↓_   | ╄  | _            |                | ┺            | 4  |
| 9                | 10   | =              | <u> </u>     |          | L        | L  |  |              |                | _            | J  |
|                  | 11   | L <sup>-</sup> |              | L        |          | 1  | 1  | 1            |                | 1            | ١  |
|                  | 12   |                |              |          | Π        |  |  | Г            | Г              | Г            | 1  |
| 10               | 13   | =              |              | 1        | 1        | T  | T  | $\vdash$     | Ħ              | 1            | 1  |
|                  | 14   | _              | $\vdash$     | +-       | +-       | +  | +  | +-           | +              | +            | 1  |
|                  | 15   | -              | -            | ⊢        | ╁        | +  | ╁  | +            | +-             | +-           | 1  |
|                  | 15   | <b> </b>       |              | ــــ     | ↓_       | ـ  | ₩  | $\perp$      | ļ.             | <b>!</b>     | 1  |
|                  | 10<br>11<br>12<br>13<br>14<br>15<br>16<br>17<br>18<br>19 | <u></u>        | $oxed{oxed}$ | L        | _        | _  | $\perp$  | _            | L              | L            | J  |
|                  | 17   |                | 1            | 1        |          |  |  | 1            |                |              | 1  |
|                  | 18   |                |              |          | $\top$   |  |  |              |                | T            | 1  |
|                  | 19   |                |              | ┢        |          | $\vdash$   | +  | +-           |                | 1-           | 1  |
|                  | 20   | _              |              | ╁        | ╁        | ├-   | ┿  | +            | ١,-            | ┢            | ł  |
|                  | 20   | _              |              | ┝        | ╀        | ₩  | ╀  | ┼            | ┝              | ļ            | ł  |
|                  | 21   |                | _            | <u> </u> | ╙        | ┺  | ╄-   | _            | _              | _            | 1  |
|                  | 22   |                |              | <u> </u> | <u>_</u> | _  |  | <u> </u>     | _              | L            | J  |
|                  | 21<br>22<br>23<br>24                                     |                |              | 1.       |          |  | 1  | 1            | 1              |              | ۱  |
|                  | 24   |                |              | Π        |          |  | Т  |              |                |              | 1  |
|                  | 25<br>26<br>27   |                |              |          |          |  |  |              |                |              | 1  |
|                  | 26   |                |              |          |          |  |  |              |                |              | l  |
|                  | 27   |                |              | ╁╾       | ╁        | -  | <del>                                     </del> | $\vdash$     | <del>  -</del> | -            | 1  |
|                  | 20   | -              | _            | -        | ┝        | -  | ╆┈   | ├            | ⊢              | -            | 1. |
|                  | 28<br>29   | -              | _            | <u> </u> | <u> </u> | _  | ├  | ┡            | ├              | <u> </u>     | ł  |
|                  | 29   | _              |              | Щ        | <u> </u> | <u> </u>   |  | ·            |                | L            | ļ  |
|                  | 30   |                |              |          |          |  |  | L            |                |              |    |
| - 1              | 31   |                |              |          |          |  |  |              |                |              | 1  |
|                  | 32   |                |              |          |          |  |  |              |                |              | 1  |
|                  | 33   |                |              | _        | T        |  | $\vdash$   | t            |                | _            | l  |
|                  | 33<br>34<br>35   | -              |              | $\vdash$ | $\vdash$ | $\vdash$   | $\vdash$   | $\vdash$     | $\vdash$       | $\vdash$     | l  |
|                  | 35   | -              |              | ┢╌       | -        | $\vdash$   | ⊢  | -            | $\vdash$       | ┝            | l  |
|                  | 26   |                |              | -        | $\vdash$ |  | <del> </del>                                     | -            | $\vdash$       | ⊢            | 1  |
|                  | 36<br>37<br>38   |                |              | $\vdash$ | ├        | <b>-</b>   | $\vdash$   | <u> </u>     | <u> </u>       | <u> </u>     | 1  |
|                  | 37   | _              |              |          |          | <u> </u>   | <u> </u>   |              | <u> </u>       | L.           | 1  |
|                  | 38   |                |              |          | L        |  | L  | L            |                |              |    |
| T                | 39   | 7              |              |          | l _      |  |  |              |                |              | 1  |
|                  | 40   | $\neg$         |              |          | Γ        | Γ  |  |              |                |              | ĺ  |
|                  | 41   | _              |              |          | Т        | Ι  | 1  | $\vdash$     | $\vdash$       | _            | l  |
|                  | 42   | $\dashv$       | -            | -        | $\vdash$ | <del>                                     </del> | _  | $\vdash$     | <u> </u>       | $\vdash$     | l  |
|                  | 43   | $\dashv$       |              |          |          | $\vdash$   | <del>                                     </del> | -            | -              | <u> </u>     | l  |
|                  |  |                |              | _        | $\vdash$ | ├-   | <u> </u>   | $\vdash$     | _              | <u> </u>     | ı  |
|                  | 44   | _              |              |          | _        | <u> </u>   | _  | Щ            | Щ.             |              |    |
|                  | 45   |                |              |          |          | L  |  |              | اللا           |              | ı  |
| [                | 46   | _ [            | _ ]          |          | L        | L  |  |              |                |              |    |
|                  | 47   |                |              |          |          | -  |  |              |                |              |    |
|                  | 48   | 7              |              |          | _        | $\vdash$   | $\vdash$   |              | $\vdash$       | $\vdash$     |    |
| <del>-  </del>   | 49   | -              | -            |          |          | -  | $\vdash$   | Н            | $\vdash$       | -            |    |
|                  | 50   | +              |              |          | _        | _  | $\vdash$   |              |                | -            |    |
| - i              | 3U   |                |              |          |          |  |  |              |                |              |    |

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| Final           | Original |          |  |  |          |  |              |               |                |              |
|                 |          |          |  |  | L        | L  |              |               |                | L            |
| .               | 51       | L        | L  | Ŀ  | <u> </u> | $\perp$  |              | Ŀ             |                | 丄            |
| <u> </u>        | 52<br>53 | L        | _  | _  | L        | ot   | $\perp$      | _             | _              | $\perp$      |
|                 | 53       | <u> </u> | _  |  | _        | 1_   | 丄            | $\perp$       |                | 上            |
|                 | 54       | _        | _  | _  | _        | ┺  | 上            | 1             | <u>_</u>       | _            |
|                 | 55       | Ŀ        |  | ļ  | <u> </u> | ↓_   | ↓_           | ↓_            | ļ              |              |
|                 | 56       | _        | _  | ↓_   | 1_       | 1  | Ŀ            | ╄             | <u> </u>       | _            |
|                 | 57       | <u> </u> | _  | ↓_   | ↓_       | 4_   | ┖            | ╄             | -              | Щ            |
| ļ               | 58       | $\vdash$ |  | -  | 4_       | ↓_   | ╄            | ╄             | $\perp$        | ļ.,          |
| _               | 59       | ⊢        | _  | ├  | ┼        | ╀  | <del> </del> | ╄             | ╀              |              |
| <u> </u>        | 60<br>61 | ⊢        | ŀ  | ╁  | -        | ├  | ╀            | $\vdash$      | ╀              | ٠.           |
| <u> </u>        | 62       | H        | -  | ├  | ╀        | ╁  | ╁            | -             | ╀              | ╀┈           |
|                 | 63       | $\vdash$ | $\vdash$   | -  | ╂        | $\vdash$   | -            | ┯             | $\vdash$       | $\vdash$     |
| $\vdash$        | 64       | ⊢        | ┢  | $\vdash$   | +        | $\vdash$   | -            | +-            | ╀              | -            |
| -               | 65       | -        | $\vdash$   | +  | -        | ╁  | $\vdash$     | +             | $\vdash$       | $\vdash$     |
|                 | 66       | -        |  | ╁  | ┼─       | ╁  | ⊢            | ┼             | ├—             | $\vdash$     |
| -               | 66<br>67 | $\vdash$ | -  | ╁  | ╁        | ┢  | ┢╾           | ┼             | -              | ⊢            |
| -               | 68       |          | -  |  | ╁        | ╁  | ╁            | ╫             | ╁              | ┢            |
|                 | 69       | $\vdash$ | <del>                                     </del> | +-   |          | +-   | ┢            | $\vdash$      | $\vdash$       | <del> </del> |
| -               | 69<br>70 | -        | 1  | $\vdash$   | ┢┈       | $\vdash$   | $\vdash$     | 1             | ├              | $\vdash$     |
|                 | 71       |          | -  | -  | t        | H  | _            | 1             | ┢              | <del> </del> |
|                 | 72       |          |  |  |          | <del>                                     </del> |              | T             |                | ┢            |
|                 | 72<br>73 |          |  |  |          | $\top$   |              | T             | Ħ              |              |
|                 | 74       |          |  | Г  |          |  |              | 1.            | Г              |              |
|                 | 75       |          |  |  |          |  |              |               |                |              |
|                 | 76       |          |  |  |          |  |              |               |                |              |
|                 | 77<br>78 |          | L  |  |          | Ц.   | L            | <u> </u>      |                |              |
|                 | 78       |          | _  | <u> </u>   | _        | _  |              | _             |                |              |
|                 | 79       |          | _  | L-   | _        | _  | <u> </u>     | _             |                |              |
| $\vdash$        | 80       |          | _  | <u> </u>   | <u> </u> | _  | _            | _             | <u> </u>       |              |
| <del>  </del>   | 81       |          |  | ├  |          | L  |              | -             | <del> </del> — |              |
| -               | 82<br>83 |          | _  | ├—   | ├        | ⊢  | ┝            | ⊢             | ⊢              | -            |
| <del>  </del>   | 84       |          |  | ⊢  | -        |  | $\vdash$     |               | ├              | _            |
| 1               | 85       |          | _  | ┢  |          |  | ┝            | -             | -              | _            |
|                 | 86       |          |  | H  | $\vdash$ | $\vdash$   |              | $\vdash$      |                | -            |
|                 | 87       |          |  | <del>                                     </del> | _        | İΤ   | _            |               |                | -            |
|                 | 88       |          |  |  |          | $\vdash$   |              |               |                |              |
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|                 | 92       |          |  |  |          |  |              |               |                |              |
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| $\vdash \vdash$ | 94       |          |  | L  |          | L  |              | Ш             | لسا            |              |
|                 | 95       |          |  | _  | <u> </u> | _  | _            | Щ             | Щ              |              |
|                 | 96       |          | _  | _  | <u> </u> | <u> </u>   |              | Ш             |                |              |
| -               | 97       | -        |  |  | $\vdash$ | _  |              | $\vdash$      |                | _            |
| H               | 98<br>99 | -        |  |  |          |  | _            | <del>  </del> | -              | _            |
| <del></del>     | 100      | $\dashv$ |  | $\vdash$   | -        | $\vdash$   |              | $\vdash$      |                | _            |
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| CI     | aim                                    | m Date       |          |              |              |          |              |          |                                   |              |
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|        |  | <del> </del> | T        | Т            | Т            | T        | ĭ            | Т        | 1                                 | т-           |
| Final  | Original                               |              |          |              |              | ;        |              |          |                                   |              |
|        | 101                                    |              | T        | Т            | T            |          | 1            | $\top$   |                                   |              |
|        | 102                                    | T            |          | Т            | 1            |          | 1            | 1        |                                   |              |
|        | 103                                    | Г            | Г        |              |              | T        |              | Τ        | 1                                 |              |
|        | 104<br>105                             |              |          |              |              |          |              |          |                                   |              |
|        | 105                                    |              |          | Π            |              | Π        | T -          | Т        | T                                 |              |
|        | 106                                    |              |          | Т            |              |          |              |          |                                   | Г            |
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|        | 109                                    |              |          |              |              |          |              |          |                                   |              |
|        | 110<br>111                             |              |          |              |              |          |              |          |                                   | L            |
|        | 111                                    | L            |          |              | <u> </u>     |          | L            | _        | _                                 |              |
|        | 112                                    | <u>_</u>     | <u> </u> |              |              | <u> </u> | L            | <u> </u> |                                   | L            |
|        | 112<br>113<br>114<br>115<br>116<br>117 |              |          |              | <u> </u>     |          | L            | <u> </u> | ┖                                 | Ľ            |
|        | 114                                    | _            | L        |              | <u> </u>     |          | 上            | <u> </u> | _                                 |              |
|        | 115                                    | _            |          | $oxed{oxed}$ |              | <u> </u> | L            | _        | L                                 |              |
|        | 116                                    |              |          |              | L.           | _        |              | _        | ┖                                 | $oxed{oxed}$ |
| _      | 117                                    |              | _        |              | $oxed{oxed}$ | ┖        | L            | <u> </u> | _                                 |              |
|        | 118                                    | _            |          | <u></u>      | <u> </u>     | _        | $oxed{oxed}$ |          | $oxed{oldsymbol{oldsymbol{eta}}}$ |              |
|        | 118<br>119<br>120<br>121               |              |          | <u> </u>     | _            | <u> </u> | _            | <u> </u> | <u> </u>                          | Щ            |
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|        | 121                                    |              |          | _            | _            | L        | <u> </u>     | <u> </u> | _                                 |              |
|        | 122                                    | _            | _        | <u> </u>     | <u> </u>     | <u> </u> | <u> </u>     | ├        |                                   | $\vdash$     |
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|        | 123<br>124<br>125                      |              | <u> </u> | <u> </u>     | _            | <u> </u> | L            | ┡        | <u> </u>                          | Ш            |
|        | 125                                    |              | _        | <u> </u>     | -            | -        | <u> </u>     | <u> </u> | ⊢                                 | Н            |
|        | 120                                    |              |          |              | _            | H        | _            | ⊢        |                                   | Н            |
|        | 126<br>127<br>128<br>129<br>130        |              | H        | <u> </u>     |              | H        | <u> </u>     | $\vdash$ | H                                 | $\vdash$     |
|        | 120                                    |              | -        | _            | -            | _        |              | -        |                                   | $\vdash$     |
|        | 130                                    |              |          | _            | _            | $\vdash$ | $\vdash$     | ├        | -                                 | -            |
|        | 131                                    |              | -        | _            | ┝            | H        | ⊢            | -        | -                                 | $\vdash$     |
|        | 131<br>132                             |              | _        | -            | -            |          | -            | ┢        | -                                 | $\vdash$     |
|        | 133                                    | _            | $\vdash$ |              | $\vdash$     | $\vdash$ | ┢            | -        |                                   |              |
| $\neg$ | 134                                    |              | Н        |              | $\vdash$     | $\vdash$ | $\vdash$     | H        |                                   | $\dashv$     |
| $\neg$ | 134<br>135                             | _            |          |              |              |          |              | _        |                                   |              |
|        | 136                                    |              |          |              |              |          |              |          |                                   |              |
|        | 137                                    |              |          |              |              |          |              |          |                                   |              |
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| Î      | 139                                    |              |          |              |              |          |              |          |                                   |              |
|        | 140                                    | $\neg$       |          |              |              |          |              |          |                                   |              |
|        | 141                                    |              |          |              |              |          |              |          |                                   |              |
|        | 142                                    |              |          |              |              |          |              |          |                                   |              |
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|        | 146                                    | _            |          |              |              |          |              |          |                                   |              |
|        | 147                                    | _            |          |              |              |          |              |          |                                   |              |
|        | 148                                    | _            | _        | _            |              |          |              |          |                                   |              |
|        | 149                                    |              | ļ        | _            | _            | $\perp$  |              | _        |                                   |              |
|        | 150                                    |              |          |              |              |          |              | Ш        | i                                 | $\sqcup$     |